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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

October 18, 2000

Atlantic Division, Naval Facilities Engineering Command
Attention Mr. Tim Reisch
1510 Gilbert Street
Norfolk, VA 23511-2699

Re: Naval Station Norfolk, St Juliens Creek Annex

Dear Mr. Reisch:

Thank you for the opportunity to review the Workplan (WP) and Sampling and Analysis Plan (SAP) for the Background Soil Investigation, and the RAGS D Tables 1 through 6 for Sites 2, 3, 4 and 5 for St. Juliens Creek Annex for St. Juliens Creek Annex. The following comments are offered for your consideration with particular attention to toxicological and risk assessment issues.

General Comments (WP and SAP for Background Soil Investigation):

Overall, the document was excellent, and is acceptable as is. The data generated from the Workplan will afford the project management team with the necessary information to determine if chemicals present at IRP sites are the result of a release or regional background conditions.

There will be ten samples from five soil types. I think this will be adequate for the statistical comparisons needed for the IRP. After the samples have been taken, it is possible that some of the soil types will have very similar chemical composition and distribution. If this is the case, then combining data from more than one soil type would increase the statistical power of the analysis. I recommend that the team explore the possibility of combining soil types based on the sampling data.

Data Evaluation, states that the data will be used in two ways to evaluate if site data is statistically similar to the background data: One, a comparison to a threshold value, and two, a statistical method. I recommend that the text state the purpose of the two tests. The tests answer different questions: Threshold - is there a hotspot? And Statistical - is the site chemical concentration on average greater than background? The answers to these questions will help the project management team when making a decision about a possible remedy at IRP sites. For example, if a site is higher than the threshold, but not greater on average than background, then a hotspot removal would likely provide adequate protection.

General Comments (RAGS D Tables 1 through 6 for Sites 2, 3, 4 and 5):

Overall, the presentation of the tables was excellent. The only concern is with regard to the exposure point concentration for lead in tables 3.1 for all sites. Lead risk assessment is a special case, where the risk is calculated using either the IEUBK model or the Adult Lead Model. In both cases the EPC should be the arithmetic mean.

If you have any questions concerning the above comments, please feel free to contact me either via e-mail (Richardson.Todd@epa.gov) or by phone at (215) 814-5264

Sincerely,

Todd Richardson
RPM, Federal Facilities Section

Copy to: Devlin Harris (RPM,Va Department of Environmental Quality)